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(54) ION EXCHANGE MEMBRANE FOR FUEL CELL,  
JUNCTION BODY AND FUEL CELL

they are pressed by the pressure at 80kg/cm<sup>2</sup> at 80°C  
for 90 seconds to form a junction body.

(57) Abstract:

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PURPOSE: To obtain a solid high polymer fuel cell having excellent output performance at a low cost by using a membrane which is obtained by leading sulfonic acid group to polyolefine, and a junction body using this membrane.

CONSTITUTION: A high density polyethylene film 6 is irradiated with electron beams, and this film is dipped for reaction in the mixture solvent of styrene- sulfonic acid sodium deoxidised previously, and acrylic acid. This reactant membrane is water -washed, and dipped in the sulfuric acid solvent to form a sulfonic acid type membrane. As gas diffusing electrodes 7, 8, electrodes made of the conductive material such as carbon material carrying platinum are used, and impregnated with proton conductive material solvent, and processed in pure water at 100°C for two hours. On the other hand, the ion exchange membrane 6 is processed in pure water at 80°C for two hours. The electrodes 7, 8 and the membrane 6 are taken out of the water, and the water content thereof is wiped off lightly, and the electrodes 7, 8 are arranged in both sides of the membrane 6, and

